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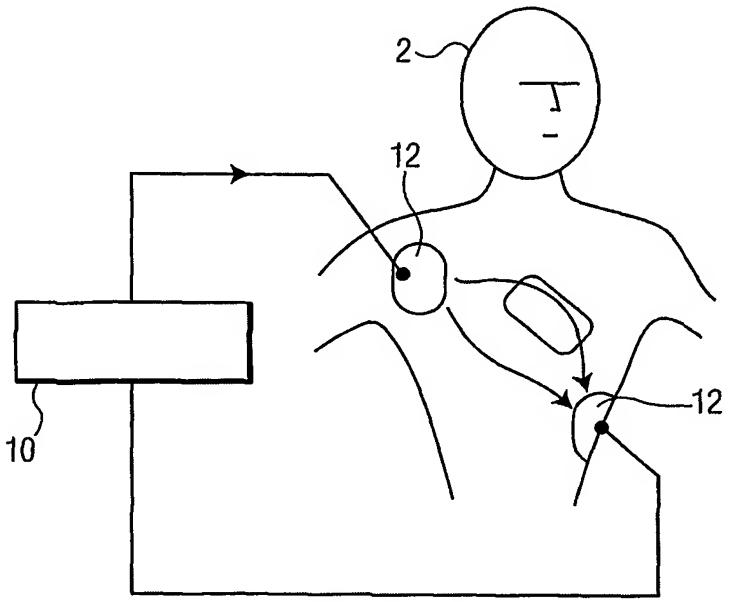
(54) Title: COMPENSATION FOR CARDIAC SHUNT CURRENTS DURING DEFIBRILLATION



(57) Abstract: A defibrillator having a pair of electrodes for delivering a defibrillation shock and a method thereof is provided.The defibrillator includes an energy-source circuit that may be discharged through electrodes on a patient to provide a biphasic voltage or current pulse. The energy-source-storage circuit is coupled across a bridge switch for delivering a defibrillation pulse to the patient through a pair of electrodes. A controller operates to control the entire defibrillation process and detects shockable rhythms from the patient via an ECG front end. The controller determines the source of the defibrillator to match the selected mode, which is inputted by connecting coded accessories, such as internal paddles, adult electrodes, or pediatric external electrodes to deliver appropriate defibrillation shocks. Other types of patient-dependent parameters are also employed to achieve the impedance compensation.

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